

Discussion Group P06 - Mechanical Seals

Leaders:

- Michael Huebner, Principal Engineer, Flowserve
- Henri Azibert, Fluid Sealing Association
- Sheifeng Wu, Director, Research & Analysis, A.W. Chesterton Company
- Brian Kalfrin, Regional Engineer, John Crane
- Todd Monroe, Machinery Consulting Engineer, LyondellBasell
- Judy Hodgson, President, Hodgson Consulting
- John Merrill, EagleBurgmann

Description

Mechanical seals are the most common method of sealing industrial centrifugal pumps and other rotary equipment. Although the basic concepts of a seal is simple, successfully using seals requires an understanding of the selection and operational requirements which can be unique for a specific application. In this discussion group, we will cover many of these considerations along with other application experiences from end users and seal OEMs. The discussion group will actively solicit topics from the attendees so the discussions will address real-world problems and challenges faced by the group.

Typical topics covered in this discussion group include:

- Changes in upcoming API 682 5th edition
- Air testing of seals in pumps prior to installation
- Challenges with low temperatures sealing
- Effective leakage containment of single seals
- Strengths and weaknesses in Plan 53A, 53B, and 53C piping plans
- Considerations when sealing abrasive slurries
- How to apply dual pressurized gas seals
- Mechanical seals for multiphase applications
- Advances in seal face materials
- Process for handling problem pump and seal applications
- Definition of mean time between failure and industry best practices
- How and when to use split seals